## PATENT ABSTRACTS OF JAPAN

(11) Publication number:

11248543 A

(43) Date of publication of application: 17.09.1999

(51) Int. CI

G01K 1/14

F25B 49/02, F25D 29/00

(21) Application number:

10064288

(22) Date of filing:

27.02.1998

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## (54) TEMPERATURE SENSING APPARATUS

## (57) Abstract:

PROBLEM TO BE SOLVED: To prevent the deformation of a temperature sensing tube and a bracket due to the freezing of moisture at a linear contact part by an arrangement wherein the temperature sensing tube comes into line contact with the holding bracket to form a gap at a part other than the contact part.

SOLUTION: A bracket 2 is fixed to a cooling plane part 5 and the holding part 3 of the bracket 2 holds a temperature sensing tube 1 while pressing resiliently above the cooling plane part 5. Outer circumferential surface of the tube 1 comes into line contact with the inner wall face of the holding part 3 and the cooling plane part 5 to form gaps between the outer circumferential surface of the tube 1 and the inner wall face of the holding part 3 and the cooling plane part 5 except the contact part. Even if condensates adhere to

the tube 1 or the bracket 2, they scarcely stand at each line contact part. Even it the condensate are exposed to temperature lower than ice point through cooling action, inner wall face of the tube 1 and the holding part 3 can be protected against application of a high pressure because the condensate can expand in the gap. Consequently, the bracket 2 and the tube 1 are protected against deformation due to freezing.

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